

AMENDMENTS TO THE CLAIMS

Please make the following amendments to the claims:

1-69. (Cancelled)

70. (Previously Presented) A communication device, comprising:

a receiver for developing a received signal; and

a digital signal processor (DSP), where said DSP comprises:

layer one logic configured to perform OSI layer one processing; and

frame check sequence logic configured to compute a frame check sequence (FCS)

on each frame of said received signal, wherein the layer one logic has access to said frame check sequence.

71. (Currently Amended) The apparatus as defined in claim 70, further comprising means for saving ~~the adaptive parameters~~ at least one parameter of an adaptive device located within said receiver, and calculated by said DSP, if said frame check sequence indicates that said received signal is error free.

72. (Previously Presented) The apparatus as defined in claim 70, further comprising means for using existing parameters of an adaptive device located within said receiver if said frame check sequence indicates that said received signal contains errors.

73. (Currently Amended) The apparatus as defined in claim 70, wherein said frame check sequence is used to calculate ~~the adaptive parameters~~ at least one parameter of ~~an~~ [[a]] an adaptive device chosen from the group consisting of an equalizer, echo-canceller, adapted gain device, and timing loop.

74. (Previously Presented) The apparatus as defined in claim 70, wherein said frame check sequence is used to adapt a receive margin level based on said received signal.

75. (Previously Presented) A method in a communication device, comprising the steps of:

developing, in a receiver, a received signal;

performing, in a digital signal processor (DSP), layer two error detection by computing a frame check sequence (FCS) on each frame of said received signal; and

performing, in the DSP, OSI layer one processing using the frame check sequence.

76. (Currently Amended) The method as defined in claim 75, further comprising the step of saving ~~the adaptive parameters~~ at least one parameter of an adaptive device located within said receiver and calculated by said DSP if said frame check sequence indicates that said received signal is error free.

77. (Previously Presented) The method as defined in claim 75, further comprising the step of using existing parameters of an adaptive device located within said receiver if said frame check sequence indicates that said received signal contains errors.

78. (Currently Amended) The method as defined in claim 75, further comprising the step of using said frame check sequence to calculate ~~the adaptive parameters~~ at least one parameter of ~~[[a]]~~ an adaptive device chosen from the group consisting of an equalizer, an echo-canceller, an adaptive gain device, and a timing loop.

79. (Previously Presented) The method as defined in claim 75, wherein said frame check sequence is used to adapt a receive margin level based on said received signal.

80. (New) The device as defined in claim 70, wherein said device operates in a multipoint environment.

81. (New) The device as defined in claim 70, wherein said device operates in a half duplex environment.

82. (New) The device as defined in claim 70, wherein said device operates in a full duplex environment.

83. (New) The device as defined in claim 70, wherein said device operates in an asymmetrical duplex environment.

84. (New) The method as defined in claim 75, wherein said device operates in a multipoint environment.

85. (New) The method as defined in claim 75, wherein said device operates in a half duplex environment.

86. (New) The method as defined in claim 75, wherein said device operates in a full duplex environment.

87. (New) The method as defined in claim 75, wherein said device operates in an asymmetrical duplex environment.

88. (New) A communication apparatus, comprising:
a receiver configured to receive a signal; and
a digital signal processor (DSP) configured to perform OSI layer one processing on the received signal and to compute a frame check sequence (FCS) on each frame of said received signal.
89. (New) The apparatus as defined in claim 88, further comprising:
a layer one processing component configured to process the received signal and to adapt its operation responsive to the frame check sequence.
90. (New) The apparatus as defined in claim 89, wherein the layer one processing component comprises at least one of an equalizer, echo-canceller, adapted gain device, and timing loop.
91. (New) The apparatus as defined in claim 88, further comprising means for saving at least one parameter of an adaptive device located within said receiver, and calculated by said DSP, if said frame check sequence indicates that said received signal is error free.
92. (New) The apparatus as defined in claim 88, further comprising means for using existing parameters of an adaptive device located within said receiver if said frame check sequence indicates that said received signal contains errors.
93. (New) The apparatus as defined in claim 88, wherein said frame check sequence is used to adapt a receive margin level based on said received signal.
94. (New) The apparatus as defined in claim 88, wherein said apparatus operates in a multipoint environment.

95. (New) The apparatus as defined in claim 88, wherein said apparatus operates in a half duplex environment.

96. (New) The apparatus as defined in claim 88, wherein said apparatus operates in a full duplex environment.

97. (New) The apparatus as defined in claim 88, wherein said apparatus operates in an asymmetrical duplex environment.

98. (New) A computer readable medium having a program for processing a signal, the program comprising logic for performing the steps of:

performing, in a digital signal processor (DSP), OSI layer one processing on a received signal to produce a received data stream;

computing, in a digital signal processor (DSP), a frame check sequence (FCS) on each frame of the received signal; and

adjusting the layer one processing of the received data stream responsive to the frame check sequence.

99. (New) The computer readable medium as defined in claim 98, wherein the adjusting logic further comprises logic for performing the step of:

saving at least one parameter implemented by the layer one processing, the parameter calculated by said DSP, if said frame check sequence indicates that said received signal is error free.

100. (New) The computer readable medium as defined in claim 98, wherein the adjusting logic further comprises logic for performing the step of:

using at least one existing parameter associated with the layer one processing if said frame check sequence indicates that said received signal contains errors.

101. (New) The computer readable medium as defined in claim 98, wherein the adjusting logic further comprises logic for performing the step of:

calculating at least one parameter used by a component performing the layer one processing, the component chosen from the group consisting of an equalizer, echo-canceller, adapted gain device, and timing loop.

102. (New) The computer readable medium as defined in claim 98, wherein the adjusting logic further comprises logic for performing the step of:

adapting a receive margin level based on said received signal.